

would be extremely difficult to arrange in any satisfactory manner the geographical distribution of the two forms, and I think it not unlikely that with a good series of examples the two would run into each other without leaving any definable line of separation. Mr. Ridgway refers this bird from Truando in his article on *D. punctigula* (l.c.), to *D. erythropygia* Sclat., but as it has no spots on the back, merely a few pale yellow lines, it is undoubtedly the same as the Costa Rica bird. Mr. Ridgway's identification may, however, eventually prove to be correct. At all events the bird from Costa Rica separated by Mr. Ridgway is not restricted to that country, as is shown by the Truando specimen. It remains therefore for some one with better material at hand than I at present possess, to fix the status of the form called *D. punctigula*.

Dendroornis obsoletus.

Dendrocolaptes obsoletus ILLIG. LICHT. Abhand. Königl. Akad. Wissens. 1818, p. 205, No. 10.—LICHT. Berlin, Abhand. 1819, p. 203, 1821, p. 265.

Picolaptes obsoletus LAFRES. Rev. Mag. Zool. 1850, p. 371.

Nasica obsoletus LAFRES. Rev. Mag. Zool. 1850, p. 423.

Habitat.—Para, Brazil.

“Rostro recto, valde compresso, cultrato, albicante, gulâ maculisque guttata capitis, colli, dorsi et pectoris sordide albo-flavescentibus; digitis pro mole tenerrimis; gonyde porrecta, culminis apice sensim deflexo. Longit. tota, 8 pollices.”

I do not know this bird.

RECENT LITERATURE.

Salvin and Godman's *Biologia Centrali-Americana—Aves*.*—Volume I of this great work, the first signature of which bears date of September,

* [Temporary Titlepage.] | *Biologia* | *Centrali-Americana*. | — | *Aves*. | Vol. I. | By | Osbert Salvin, M. A., F. R. S., &c., | and | Frederick DuCane Godman, F. R. S., &c. | == | 1879-1887.

For a previous notice of this work (Parts I-X) see *Bulletin Nuttall Ornithological Club*, Vol. VI, No. 3, July, 1881, pp. 174-176.

1879, and the last that of April, 1887, has been issued. It is a large quarto of 512 pages of text, illustrated by 35 beautiful hand-colored plates* by Keulemans, the well-known ornithological artist and illustrator of Dresser's 'Birds of Europe' and others of the more recent high-class European bird books. The classification adopted is that of Sclater and Salvin's 'Nomenclator Avium Neotropicalium' (1873), and the geographical field that embraced between the United States-Mexican boundary on the one hand and the Isthmus of Panama on the other, or the continental part of that portion of the western hemisphere designated by Professor Baird, in his 'Review of American Birds' (1864-66), 'Middle America.'

Volume I of the 'Biologia' includes the whole of the Oscines, and is the only single and approximately complete work in existence on the special subject to which it pertains. The high reputation of the authors is of itself a sufficient guarantee that their task has been intelligently and thoroughly performed, and has resulted in a grand work which is absolutely indispensable to students of New World ornithology, highly useful to those who labor in other geographical fields, and must long remain the standard authority on the birds of Central America.

As was to be expected from the character of their previous writings on the same subject, the authors of the 'Biologia' treat their subject from the conservative standpoint to which English naturalists, for the most part, still adhere; and it is the natural sequence of this method, but more especially the unfortunate adoption of the purely binomial system of nomenclature, which affords most of the grounds for criticism; the very great importance of the work rendering such defects highly conspicuous. It would have been better had the authors followed, to some extent at least, the rulings of the 'Committee on Species and Subspecies' of the American Ornithologists' Union regarding the status of certain 'Nearctic' forms which have been so carefully investigated with the aid of large series of specimens on this side of the Atlantic, instead of depending on their own limited, and often misleading, material. In all probability, however, the remaining portion of the work will be less marred by errors of this kind, since Mr. Henshaw's fine collection has been transferred to the British Museum, where it can readily be compared with that belonging to the authors of the 'Biologia,' also, we understand, to be deposited there as each group is worked up.

We have already remarked that the comparatively few defects of the work are chiefly the direct result of adherence to the binomial system, "pure and simple," of nomenclature. When this is strictly followed, the finest discrimination and soundest judgment can hardly prevent inconsistent rulings as to rank of forms, some subspecies being elevated to specific rank, and others degraded to mere synonyms. Instances of this sort in Vol. I of the 'Biologia' are not numerous, but there are enough to be regretted; and since most of them affect forms belonging to the North American

* While these illustrations are eminently satisfactory from an artistic point of view, they might have been more accurate ornithologically.

fauna we may as well give a list of them: *Turdus auduboni* and *T. swainsonii* are ranked as species, distinct from *T. pallasi* and *T. ustulatus* (both of which are also given), as are also *Vireo cassinii* and *V. plumbeus*; *Pyrrhula cooperi* is recognized as specifically distinct from *P. æstiva*; *Melospiza montana* and *M. heermanni* are also regarded as species, the latter, by the way, being not *M. heermanni* but *M. fasciata mexicana*, one of the most strongly marked of the many geographical forms into which *M. fasciata* has become differentiated. The same rank is accorded *Cardinalis igneus*, though the equally distinct form belonging to southeastern Mexico (*C. cardinalis coccineus*) is referred to *C. virginianus*,* and to *Chondestes strigatus*, although the latter is no more different from *C. grammacus* than *Spizella socialis arizonæ*, *Passerculus sandwichensis alaudinus*, and *Coturniculus passerinus perpallidus* are from *S. socialis*. *P. sandwichensis* and *C. passerinus*, respectively, these three trinomials being given as mere synonyms of the binomials which follow. The differences between the two forms of *Chondestes* are, in fact, of exactly the same character as those which exist between the forms of *Spizella*, *Passerculus*, and *Coturniculus*, above mentioned; and if *Chondestes strigatus* is recognized as a species, so also should be *Spizella arizonæ*, *Passerculus alaudinus*, and *Coturniculus perpallidus*. But to accord these specific rank would be a violation of our knowledge of their relationships, for every ornithologist who has compared large series of specimens knows that they intergrade completely with their eastern or western representatives along the line where their habitats merge together, just as does *Chondestes grammacus strigatus* with the true *C. grammacus*.

Icterus cucullatus nelsoni is given as a distinct species (*I. nelsoni*), while an equally marked variation, in the opposite direction, from the typical form, *I. c. igneus*,† is considered the same as *I. cucullatus*.

These instances show clearly how useful, if not indispensable, is the modified form of the binomial system of nomenclature, which has been adopted and, as consistently as possible, followed by the Committee of the American Ornithologists' Union, and not a few of the working ornithologists of Europe as well.

In other cases, we regret to see forms which, in the light of material contained in collections on this side of the Atlantic, appear to be distinct enough to merit at least subspecific recognition, utterly ignored, except that their names are given in the synonymy. Such as these are the Mexican and Guatemalan Bluebirds (*Sialia sialis azurea* and *S. s. guatemalæ*), which are called simply *S. sialis*; *Icteria longicauda* (*I. virens longicauda* of American authors), which is considered a synonym of *I. virens*, yet is quite as different from the latter as is *Pyrrhula cooperi* from *P. æstiva*; and the following additional but no less conspicuous cases: The several South American forms of *Progne* which have uniform blue-black males

* On this subject see 'Proceedings of the United States National Museum,' Vol. VIII, 1885, pp. 569-570.

† See 'Proceedings of the United States National Museum,' Vol. VIII, p. 19.

are referred to *P. subis*; all the Central American Mockingbirds except the northern *M. polyglottos*, which occurs also in Mexico, are referred to the South American *M. gilvus*, a species which apparently extends no farther north than Guatemala, if, indeed, it occurs beyond Costa Rica, the Mexican forms which have been referred to it being at least sub-specifically distinct.* The bird called *Molothrus æneus* includes two very distinct species, *M. æneus* (Wagl.) and *M. robustus* Cab., but up to the time the 'Biologia' was published the differences between them had not been pointed out.† The Meadowlarks are 'lumped' into one species, *Sturnella magna*, notwithstanding two very distinct forms (probably species), *S. magna mexicana* and *S. neglecta*, occur in Mexico, besides a third (*S. hippocrepis*) in Cuba. Under the name *Aphelocoma californica*, which belongs to a form whose range certainly does not extend into Mexico, except as a well-marked subspecies‡ in the peninsula of Lower California, are included the *A. sumichrasti*§ and *A. cyanotis*||, purely Mexican forms, whose respective ranges are separated from that of *A. californica* by the intrusion of *A. woodhousei*, in Arizona. The name *Aphelocoma ultramarina*, even if belonging to either of the forms which are referred to it, also covers, according to the synonymy, three well-marked forms, one of which is undoubtedly specifically distinct from the others. This is the *A. couchi*, a smaller and much shorter-tailed species than *A. sieberii*, with whiter under parts, the sides of the head much lighter and brighter blue, and the tail less graduated, found in the Mexican States of Tamaulipas and Nuevo Leon; *A. sieberii* of southern Mexico and its much paler and grayer northern race *A. s. arizonæ* being larger every way, with the tail proportionally longer as well as much more rounded, besides differing in the darker under parts and darker and less bluish color of the sides of the head. The two strongly marked forms of *Xanthoura* are likewise considered identical; yet no one having a series of specimens from the Rio Grande Valley and an equal number from Yucatan or Guatemala, without specimens from intermediate localities, would think of uniting them under one name. It is true that they intergrade; but if they did not, we should be justified in considering them distinct species (*X. luxuosa* and *X. guatemalensis*); recognizing, however, the fact of one extreme grading into the other, through specimens from intermediate localities, we should not be justified in thus naming them, a trinomial designation for the more recently named form (*X. luxuosa guatemalensis*) expressing their relationship much better.

* See 'Proceedings of the United States National Museum,' Vol. V, pp. 10-12; Vol. VIII, p. 562, and Vol. X, p. 506.

† They were first formally separated, as *Calliothrus æneus* and *C. robustus*, in the writer's 'Manual of North American Birds' (p. 589), in 1887.

‡ *A. c. hypoleuca*, 'Manual of North American Birds,' p. 356.

§ History of North American Birds, Vol. II, p. 283; Cat. B. Brit. Mus. Vol. III, p. 14; Man. N. Am. B., p. 356.

|| Man. N. Am. B., p. 357.

We cannot agree with the authors of the 'Biologia' in referring *Zonotrichia vulcani* Boncard to the genus *Zonotrichia*, and *Fringilla chlorura* Aud. to the genus *Embernagra*, although the reasons given for such reference have been carefully considered. Regarding the former, these reasons are as follows: "This somewhat abnormal *Zonotrichia* was removed from this genus and placed in *Junco* by Mr. Ridgway chiefly on account of the color of the irides, which are yellow as in *J. cinereus* and its allies. No *Junco* has a spotted back in the adult nor a tail of uniform color." This statement however does not fairly represent the reasons given for considering the bird more a *Junco* than a *Zonotrichia*, for, while we said that "it agrees perfectly in its generic characters with the former, except that the back is streaked, while there is no white on the lateral tail-feathers," the color of the iris was mentioned only incidentally, as was also its alpine habitat. It is true that no other species of *Junco* has, when adult, a streaked back or lateral tail-feathers without a considerable white patch, and most of the species of *Junco* also have a dark brown iris. But it is equally true that no species of *Zonotrichia* * is without white wing-bands and very conspicuous black stripes on the head (or else with the head wholly black). Not one of them has the bill so slender as in '*Z. vulcani*', the tarsi so lengthened, or the tail so short, compared with the wing. In all these structural characters it agrees closely with *Junco alticola*, as it does also, very closely too, in the uniform dull grayish head with distinctly blackish lores, the general coloration of the under parts, and the absence of wing markings; while a close inspection will discover distinct remains of the white tail-patches. In fact, were it not for the broad black streaks on the back, we doubt whether its reference to *Junco* would ever have been questioned. We admit that it is not a typical member of that genus; but if it is to be referred to one or the other, reasons for its reference to *Junco* appear to very greatly preponderate.†

No special reasons are assigned for placing the bird which we have been accustomed to call *Pipilo chlorurus* in the genus *Embernagra*, but this is apparently done on account of some resemblance in coloration, the bird in question and the typical *Embernagra* having the wings and tail uniform olive green. The numerous and considerable differences of form, however, appear to have been overlooked, as well as the fact that other species of *Pipilo* approach *P. chlorurus* in one point or another of its aberrant coloration. All the true *Embernagra* have the tail either decidedly shorter than the wing or else not any longer; *P. chlorurus*, on

* We consider the genus *Zonotrichia* a true Nearctic type, including only those species which belong to the North American fauna. They are all of boreal or alpine distribution, breeding chiefly north of the United States except at high elevations.

† If the streaked back of '*Junco vulcani*' is sufficient to exclude it from the genus *Junco*, why should not the streaked back (and plain or finely streaked head) of '*Embernagra platensis*' exclude that species from the genus *Embernagra*, all the other species of which have plain backs and conspicuously striped heads?

the other hand, has the tail much longer than the wing as do also the other species of *Pipilo*. No true *Embernagra* has a rufous pileum, but some true *Pipilos* have; no *Embernagra* has a white throat-patch and malar stripe, but such markings occur in *Pipilo rutilus*. Further, the olive green wings and tail of *P. chlorurus* are reproduced in *P. macronyx* and *P. chlorosoma*, large species of the black-headed and -chested and rufous-sided group, while *P. complexus** combines with the general plumage of the *P. maculatus* group the white throat-patch and rufous pileum of *P. chlorurus*, although these markings are less developed.

Notwithstanding the strong conservatism of the authors of the 'Biologia,' genera have fared well by them, and we observe with pleasure that such familiar and well-marked groups or types as those which until recently were familiar to us as *Lophophanes*, *Peucedramus*, *Oporornis*, *Passerculus*, and *Coturniculus*, degraded to the rank of subgenera by the A. O. U. committee, are recognized as genera. It matters little whether these are true genera or not; they are well-defined groups except *Peucedramus*, and that is an isolated or monotypic form, with characters as well defined as those of many so-called genera which have never or seldom been challenged. The species of *Merula*, however, are all ranged under *Turdus*; and, with this single exception, we have no particular fault to find with the treatment of genera, although from the A. O. U. standpoint some of the generic names should be different, or differently spelled, (e. g. *Myiadestes* instead of *Myiadectes*, *Helmitherus* instead of *Helminthotherus*, *Helminthophila* instead of *Helminthophaga*, *Compsothlypis* instead of *Parula*, etc.).

There are a few forms given under names which belong to allied species or races, but they were either separated subsequent to the printing of the pages on which they occur or so soon before that the authors probably had not become aware of such separation. The bird called *Rhodinocichla rosea* is a case of this kind; the Mexican bird was named *R. rosea schistacea* in December, 1878,† and should probably be ranked as a species, not only on account of its marked differences of coloration and proportions from *R. rosea* but also because of the wide separation of its habitat.

We have already‡ criticised the change of name in the Cliff Swallow from *Petrochelidon lunifrons* (Say) to *P. pyrrhonota* (Vieill.) and the reasons given for objecting to this change we still believe to be valid.

We have endeavored to point out as fully as possible the defects — from our standpoint — of this work, both as resulting from the insufficient material examined and the adoption of rules of nomenclature different from those which have been in vogue among American ornithologists, as well as the different views entertained by the authors regarding the question of species and subspecies. The small number of these defects in a work of such magnitude shows how well the authors of the 'Biologia' have performed their task.

* See Proc. M. S. Nat. Mus., Vol. IX, pp. 147-148.

† Proc. U. S. Nat. Mus., Vol. I, p. 247.

‡ Proc. U. S. Nat. Mus., Vol. IX, p. 139, foot-note.

In conclusion we would say that by far the most unsatisfactory feature of the work is its slow progress. The first volume covers only about one third of the entire field, yet seven and a half years are comprised between the dates of publication of the first and last signatures. At this rate, we may look for the completion of the work not sooner than the close of the present century! It is to be hoped, however, that the authors may manage to hasten its completion, for, until the remaining families shall have been treated, any work done by others in the same field will be, necessarily, premature. — ROBERT RIDGWAY.

Saunders's Manual of British Birds.*—The purpose of the present volume is "to convey as much information *up to date* as may be practicable in *one volume*." The plan of the work, as the author says, "may justly be called Procrustean," just two pages being allowed to each species, the matter consisting of a full-length figure and a page and three quarters of text. Very few of the wood-cuts are new, nearly all being from "the blocks from which the illustrations were struck for the four editions of Yarrell's 'British Birds'," to which, however, have been added figures of many of the recent wanderers to Great Britain, and a few fresh figures of other species, including the Great Auk. In this small space the author has compressed a fair statement of the habitat and migrations of each species treated, of course, with special reference to its status as a British bird; a summary of its life-history, and a description of its external characters, including seasonal, sexual and other phases of plumage.

There is neither synonymy nor any bibliographical references, and the generic diagnoses are given in the 'Introduction', under their respective orders and families, arranged mainly in accordance with the B. O. U. 'List of British Birds.' The work is thus in a true sense a 'Manual',—an epitome of what is most interesting and most useful to the general reader. The addition of analytical keys and tables would perhaps have made the book more useful to the young student without greatly increasing the cost or size of the 'Manual'.

The number of species considered as unquestionably entitled to be reckoned as British is 367; a few others are incidentally mentioned, respecting the status of which there are conflicting opinions. "The species which have been ascertained to breed within the United Kingdom during the present century may be taken as 200; about 70 non-breeding wanderers have occurred fewer than six times, and 59 others are more or less infrequent visitors; while 38 species annually make their appearance on migration or during the colder months, in some portion of our long, narrow group of islands or the surrounding waters" (p. v).

* An Illustrated Manual | of | British Birds. | By | Howard Saunders, F. L. S., F. Z. S., &c. | Editor of the Third and fourth Volumes of "Yarrell's History of | British Birds," Fourth Edition. | With Illustrations of nearly every Species. | [Monogram.] London: Gurney and Jackson, 1, Paternoster Row. | (Successors to Mr. Van Voorst.) | 1889.—8vo, pp. xl + 754, with 3 maps, and "367 illustrations."